ESOHCAMP Air Findings

Mark Ruksc
Headquarters Air Force Reserve Command
Civil Engineering
Environmental Quality

AGENDA

- Environmental Mission
- Air Force Reserve Command
- ESOHCAMP Background & Objectives
- Assessment Metrics
- Assessment Findings
- Positives
- The Extreme

Mission Statement

Our mission is to provide effective, efficient, timely, and accurate support to AFRC installations and tenant units on behalf of their environmental programs. By enabling and facilitating the implementation of comprehensive, world-class environmental programs at our installations, we assure our commands ability to maintain compliance, make sustainable decisions, prevent future pollution, and support the overall Air Force mission.

Enable the Mission

The Air Force Reserve Command

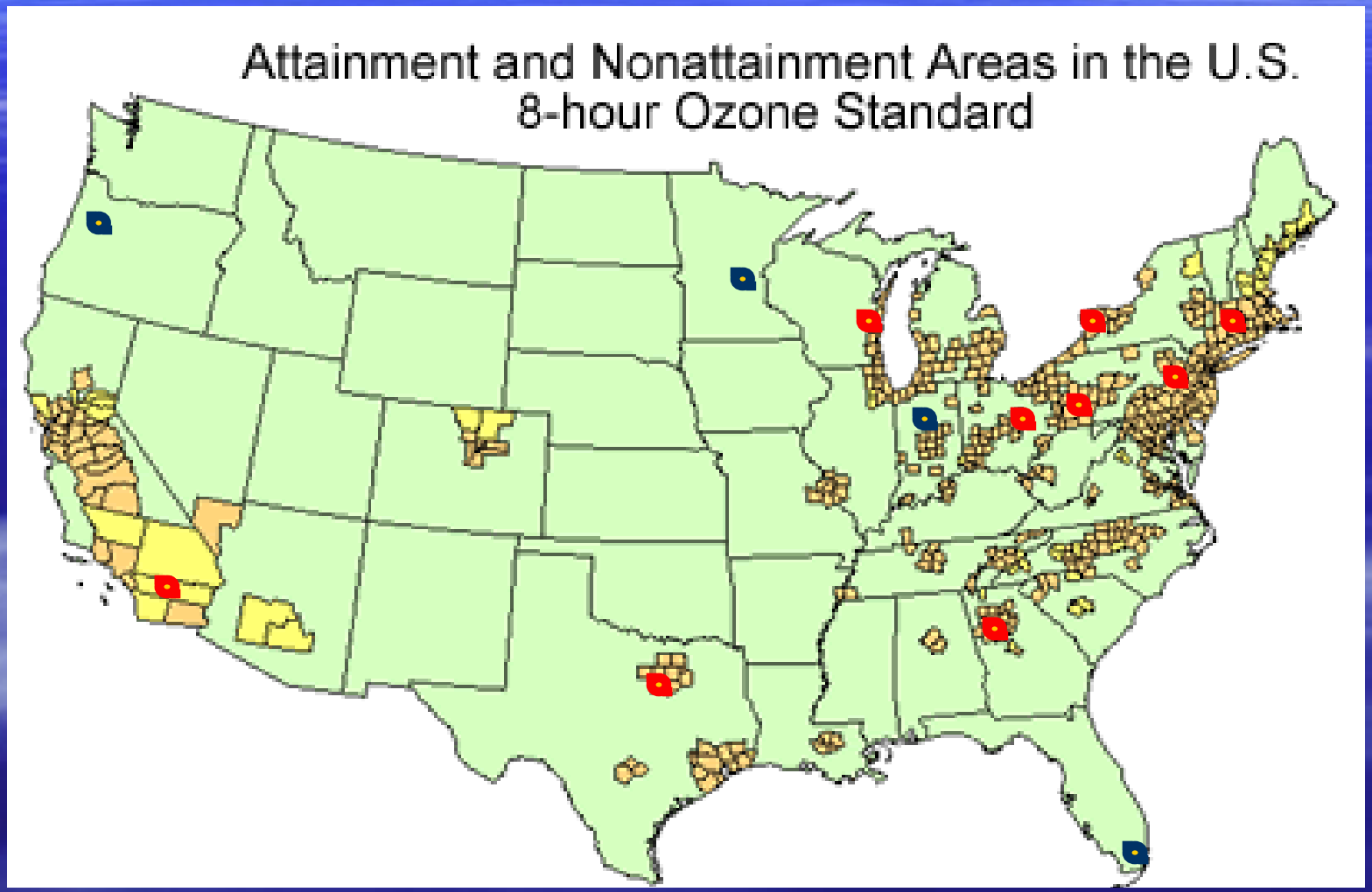
HOST BASES

Dobbins ARB GA
Grissom ARB IN
Westover ARB MA
Gen Mitchell ARS WI
March ARB CA
Homestead ARS FL
Youngstown ARS OH
Pittsburgh ARS PA
Willow Grove ARS PA
Niagara Fall ARS NY
Minn-St Paul ARS MN

MAJOR TENANT LOCATIONS

NAS JRB New Orleans LA
JRB Ft Worth
Selfridge ANGB MI
Portland IAP OR

Air Quality at AFRC Bases



ESOHCAMP Objective

- Per Executive Order 12088, the Air Force initiated ECAMP to aid installations and organizations to comply with all applicable pollution control standards
- The objective is to provide a process to help commanders assess the status of their Environmental Management Systems and to identify and track solutions to environmental problems
- In 2002 the AFRC changed their assessment from ECAMP to ESOHCAMP
- A team of Air Force and contractor personnel perform the assessment

ESOHCAMP Metrics

	2003	2004	Overall
Major	33.3%	84.8%	71.1%
Minor	0.0%	3.0%	2.2%
MP	50.0%	6.1%	17.8%
Positive	16.7%	6.1%	8.9%

Air Quality Only

ESOHCAMP Metrics

Finding Type (Air Quality)	%
Permit Conditions Not Met	**12.1%**
Emission Inventory Inaccurate	3.0%
Emissions Limits Or Operational Requirements Not Met	**15.2%**
Sources Not Permitted	3.0%
ODC Management Deficiency	**9.1%**
Solvent Degreaser Deficiencies	3.0%
Construction Permits Missing	**15.2%**
Vehicle Emissions Testing	**9.1%**
Operating Permit Incomplete	3.0%
Gasoline/Fuels Management	6.1%
Other - Air	9.1%
Positive	**6.1%**
Management Practice	6.1%

ESOHCAMP Air Findings

Finding Title – Air Emission Inventory Not Submitted

Finding Code – "Other"

Details – EPA thresholds are well defined for Major Sources and Non Attainment designations

Requirements vary by state; some local regulator's require AEI submissions based upon a specific pollutant PTE exceeding 25 TPY, others require an AEI when the PTE for any pollutant exceeds 25 TPY

Root Cause – Regulations Misinterpreted or unknown

ESOHCAMP Air Findings

Finding Title – Construction Without A Required Permit

Finding Code – "Construction Permit Missing"

Details – Rule requires that facilities obtain a permit prior to beginning construction unless the equipment has a specific exemption

Worst Offender: internal combustion engines

Root Cause – Regulations Misinterpreted or Unknown

ESOHCAMP Air Findings

Finding Title – Freon Recovery Systems Certification

Finding Code – "ODC Management Deficiency"

Details – 40 CFR 82.162 requires that owners or operators of Freon recovery equipment must submit a one time certification

Operators must be trained and certified

Watch your tenant organizations and your shop or BOS contractors for new equipment

Root Cause – Personnel not trained

ESOHCAMP Air Findings

Finding Title – Incomplete Records

Finding Code – "Emissions Limits Or Operational Requirements Not Met"
Details – Permit Conditions require…
…Operators of Coating Facilities to log; type of material being coated, applicable local rule, amount of material used and purpose.
The installations logs were without applicable rules and purpose (e.g. was solvent was used for thinner or for cleaning)

…Operators of emergency generators record the date of operation, the hours of operation and the reason for operation each time the generator operates.
The installations logs only listed the hours of operation

Root Cause – Insufficient skills to execute procedures

ESOHCAMP Air Findings

Finding Title – **“Vehicles Not Smog Checked”**

Finding Code – **“Vehicle Emissions Testing”**

Details – **Regulations require that all vehicles must undergo exhaust emission inspections**

Government vehicles had not been smog checked and were not exempt from testing

Root Cause – **Regulations Misinterpreted or unknown and Procedures not developed**

ESOHCAMP Air Findings

Finding Title – Reid Vapor Pressure

Finding Code – "Permit Conditions Not Met"

Details – Regulations require that gasoline supplied by a wholesale consumer meet specific requirements at different times of the year

- Specifically, lower Reid Vapor Pressure's during the ozone season to reduce exhaust emissions

- With smaller installations, the turn over is at times not great enough to allow for the new fuel to be supplied in time

Root Cause – Procedures not developed

ESOHCAMP Air Findings

Finding Code – "Positive"

Details –

- **Labels are placed on furnaces, boilers, ASTs, and generators stating that the equipment is an air emission source. It also states that if any modification or replacement is made to the source, CEV should be notified. Allowing CEV to make sure the air permit is updated accordingly**
- **A Coatings Operator devised and installed additional fabric filters over the top of the primary filters at a paint booth to increase the particulate removal efficiency of the paint booth and to lengthen the life of the primary filters.**

ESOHCAMP Air Findings

Finding Code – "Positive"

Details –

The installation's Air PM with a consultant developed a VOC emission tracking tool

An Excel spreadsheet populated with common paint formulations, allowing Shop personnel to easily input the amount of paint used for a particular job

The spreadsheet automatically calculated the amount of VOC being emitted in pounds per hour and pounds per day from the painting operation

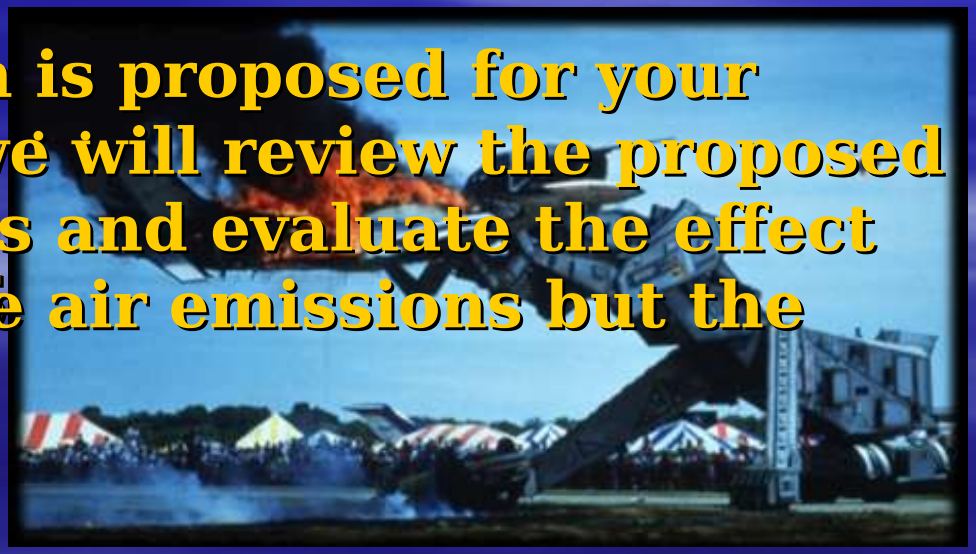
The tool allowed compliance with the VOC emission rate limits and also eased the burden of reading hand-written paint logs

Extreme

Characteristic	Issue	Resolution
Maximum Height 40’	Glide Slope	Locate outside clear zon
Weight 60,000 pounds	Pavement Integrity	Run MicroPaver Analysis
Crushes cars	GOV or POV, FOD?	Proceed with caution
Breathes 20 foot flames	Opacity Monitoring	Stop the Show!!

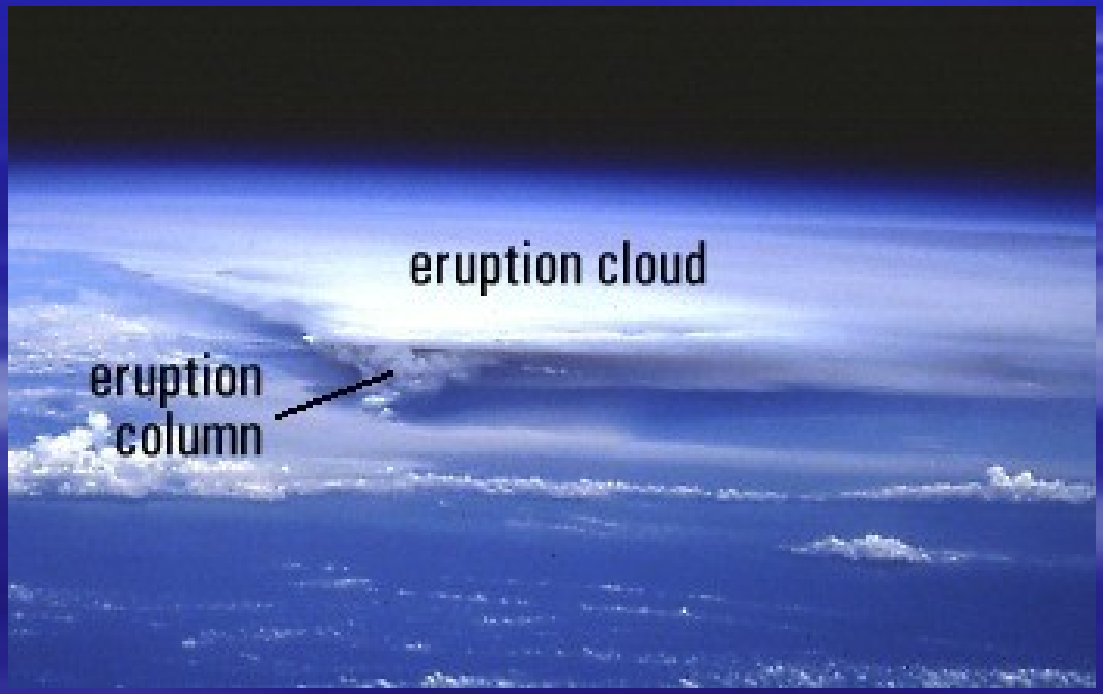
“ROBOSAURUS . . . AT HIS CARNIVOROUS BEST.”

A new mission is proposed for your installation, we will review the proposed characteristics and evaluate the effect on not just the air emissions but the installation.



"ROBOSAURUS AT HIS CAR-NIVOROUS BEST!"

- The display included burning a car that violated Visible Emissions variance allowance
- The installation cancelled the burning car portion from the next day's performance, which earned some "brownie points"
- The base submitted the required post-Air Show report including excess emission fees to the Air Hearing Board
- Beware of the Son of Robosaurus!



ESOHCAMP Conclusions

- **Be aware of your permit requirements, pay attention to the details**
- **Share your positives**
- **It’s better that the ESOHCAMP team be the source of findings versus a regulator**
- **Questions?**